Bioterrorism Program Report

Table of Contents

Public Health Preparedness and Response to Bioterrorism Program (CDC)	2
Communicable Disease Surveillance	2 2
Pre-event Smallpox Vaccination Program	2
Biological Laboratory	4
Information Technology	5
Geographic Information Systems	7
Geographic Data Coding	7
Risk Communication and Public Health Information	9
Municipal Network – RINET-Muni	9
Bioterrorism Awareness	10
Risk Communication Training	11
Emergency Public Information Line	11
Emergency Response Plans for HEALTH	13
Education and Training	14
Bioterrorism Hospital Preparedness Program (HRSA)	16
Hospital Emergency Room Diversion Plan	16
Inter-Hospital Communications	17
Hospital Capacity Enhancement	18
Trauma Care Systems	20
Coordinated Hospital Planning and System Development	21
Program Updates (CDC grant)	22
Drinking Water Security	22
Food Security	23
Vulnerability Assessment of Indoor Air Handling Systems	24
Radiation Safety	25
School and Child Care Center Emergency Response	26
Removal of Laboratory Chemicals from Schools	27
Mercury Thermometer Exchange Program	28
Academic Partners (CDC grant)	29
Response to Ricin Discovery	30
Bioterrorism Grants Budgets	31

Public Health Preparedness and Response to Bioterrorism Program (CDC Grant)

Communicable Disease Surveillance

Goal: To develop an effective surveillance system for rapid detection of communicable disease, including acts of bioterrorism

<u>Partners</u>: Hospitals, clinics, Rhode Island Emergency Management Agency, Primary Care Physicians Advisory Committee, Hospital Preparedness Planning Committee, Center for Biodefense and Emerging Pathogens, Centers for Disease Control, FBI, Hospital Association of RI, Infection Control Practitioners of New England

Major Accomplishments:

- Developed a surveillance system for smallpox vaccine adverse events and management;
- ➤ Developed laboratory and epidemiology surveillance manuals for the detection of BT agents;
- ➤ Enhanced the technical quality of our web materials that are directed toward medical providers;
- ➤ Updated reporting rules and regulations to include agents of bioterrorism, and to require reports on potential terrorist events or unusual illness clusters, and provided physician guidelines for epidemiological response to BT agents;
- ➤ Reallocated reportable disease assignments among a larger number of public health nurses and epidemiologists which has provided depth and the ability to evaluate surveillance systems;
- > Developed emergency response plans for smallpox and SARS;
- ➤ Enhanced ability to provide emergency communications with medical providers using rapid broadcast FAX capability;
- Developed protocols and provided risk assessment and risk communication to medical providers and members of the public relative to suspect anthrax powder incidents; and
- ➤ Improved ability to case manage laboratory specimens from community sources for transfer to state laboratory.

Pre-Event Smallpox Vaccination Program

Goal: To prepare for the threat of a terrorist act involving smallpox

<u>Partners</u>: Centers for Disease Control and Prevention (CDC), Mental Health Retardation and Hospitals Eleanor Slater Hospital (Manual Mathias building), National Guard Troops, Center for Biodefense & Emerging Pathogens, Memorial Hospital of RI, Hospital Association of RI, Infection Control Practitioners of New England

- Established a pre-event smallpox vaccination clinic for vaccination of health care and emergency response personnel;
- > Trained nursing staff in both vaccination and medical screening procedures;
- > Developed clinic policies and procedures;
- > Developed appropriate medical screening procedures to ensure that persons with contra-indications are not vaccinated;
- > Posted updates on Departmental website.

Biological Laboratory

Goal: Improve surveillance for both natural and intentional (bioterrorism) infectious disease outbreaks

<u>Partners</u>: The Rhode Island WMD Responders Group, comprised of local FBI, the Rhode Island State Police, Municipal Hazmat Teams, the Rhode Island Department of Environmental Management, the Rhode Island Emergency Management Agency, the Rhode Island State Fire Marshal and chaired by the HEALTH Laboratory, works cooperatively to address issues related to WMD response and is currently working to revise environmental specimen screening and submission procedures to reflect an "all hazards" approach. The local FBI has been extremely helpful and cooperative since the inception of the grant at assisting the HEALTH laboratory with threat assessment and chain of custody issues

Major Accomplishments and Capacity Development:

- ➤ HEALTH Laboratory now has the capacity to detect infectious agents at the molecular level (DNA) in both clinical specimens and environmental samples. This new sophisticated technology enables a presumptive laboratory diagnosis within several hours of potential microbial agents of bioterrorism and other pathogenic microorganisms of public health significance. Previous diagnostic methods required cultural methods in which several days were required to grow and identify the microorganism.
- ➤ HEALTH Laboratory Virology Unit that is capable of detecting and identifying viruses that produce rashes that could be confused with smallpox. Additionally, the Virology Unit has enabled the HEALTH Laboratory to start a respiratory virus surveillance program and develop capacity to test for SARS. Furthermore, the Unit improved our surveillance capacity for rabies, West Nile Virus, and the Eastern Equine Encephalitis (EEE) virus.
- ➤ Building the RI Laboratory Response Network (RI LRN) comprised of the HEALTH Bioterrorism Response Laboratory and all of the clinical microbiology labs within the state, hospital and private that function as Sentinel Laboratories within the National Laboratory Response Network. RILRN addresses laboratory protocol issues, surge capacity and coordination of response.

Exercises:

The HEALTH Bioterrorism Response Laboratory conducted the first statewide drill of the RI LRN in June 2003. A communications network and key contact data base allows our laboratory to communicate rapidly with each of the Sentinel laboratories via blast fax and email. The communication network is routinely exercised to send out information and alerts.

Information Technology

<u>Goal</u>: To ensure effective communications connectivity among internal and external partners by continuous, high speed connectivity to the Internet, routine use of email for notification of alerts; to ensure a method of emergency communication for participants in public health emergency response that is fully redundant with email; to ensure the ongoing protection of critical data and information systems and capabilities for continuity of operations; and to ensure electronic exchange of clinical, laboratory, environmental and other public health information in standard formats between the computer systems of public health partners.

<u>Partners</u>: The Department of Administration (DOA), Office of Library Information Services (OLIS); Local Cities and Towns (Fire Departments, Police Units, 24 hour dispatch); Hospital Laboratories (for the shared clinical lab data); Other state agencies (such as RI Emergency Management Agency (RI EMA), Department of Transportation (DOT), Department of Environmental Management (DEM), National Guard, and E-911.

Major Accomplishments and Capacity Development:

- Disaster Recovery and Redundancy of Data Storage
 - We installed a redundant Storage Area Network (SAN) for storing all departmental electronic data. Each SAN is essentially a massive hard drive unit to house all the data from our internal servers and eventually all individual PCs. There is one SAN here at HEALTH and a second off-site at the State's Johnston Computer facility. This will not only facilitate departmental level backups of servers and individual workstations, but provide access to data in the event of a disruption of operations here at HEALTH. We could, with some reconfiguration, access data at the Johnston facility to maintain critical HEALTH operations.
- ➤ Interoperable Laboratory Data and Disease Surveillance System
 HEALTH Labs are undergoing installation of a new Clinical Laboratory Information
 System (LIMS) to function as a repository and surveillance tool for electronically
 collecting and evaluating clinical results from all hospital and other clinical labs. We
 are currently implementing Phase I to upgrade the new Clinical Laboratory
 Information Management System at the Health Lab with an expected "go live" date
 on April 21, 2004. We will then proceed to Phase II, which consists of connecting
 the hospitals to the Cerner Clinical Lab Information Management System by
 December, 2004. When completed this system will provide the data feed to the
 NEDSS Base System, scheduled for installation in May 2004. Once completed, this
 system will provide unparalleled surveillance capability for Rhode Island.
- > Improvement to Network Infrastructure
 - Network infrastructure improvements have been completed including remote access to email, high-speed intelligent network switches to provide higher throughput/bandwith, and a redundant wireless connection to our Health Labs. We are soon to have remote access to files stored on internal workstations as well as access to business critical applications. The purpose of these improvements is to make our network more robust and improve our ability to exchange data with internal and external partners.

> Redundant Emergency Communications

In conjunction with RI EMA and DOT, we have installed 800Mhz radios at 66 sites housing 24 hour dispatch units in State agencies and city/town locations. This plan follows CDC's guidelines for radio communication. This will allow a redundant form of reliable communication between key partners, especially in a disaster situation where land lines or cell phone service has been disrupted. In the future it will be possible to utilize this same technology for transmission of limited amounts electronic data (i.e. from a computer network) in an emergency.

> Secure Remote Access Capability

We have installed a Virtual Private Network (VPN) device at the DOA to facilitate secure connections between remote locations and applications here at HEALTH. This provides the highest level of secure data transmission to ensure confidential messages are exchanged without unintentional compromise.

See Geographic Information Systems – A Key Component of Emergency Preparedness and Response

Goal: To develop emergency preparedness and response capacity for GIS

<u>Partners</u>: HEALTH Bioterrorism staff, the Rhode Island Emergency Management Agency, and the RIGIS consortium

Major Accomplishments:

- ➤ Developed an emergency preparedness and response capacity for GIS that builds on the underlying GIS infrastructure in HEALTH and the state. This capacity includes
 - Computer hardware: Portable, high-end configuration appropriate to GIS requirements, capable of processing and displaying HEALTH's catalog of geographic data
 - Computer software: All necessary GIS suite components, compatible with GIS components in everyday usage with HEALTH's database management systems
 - Databases: All data layers (files) from the Rhode Island Geographic Information System (RIGIS) catalog, standardized in the latest GIS format, supplemented by other key HEALTH data layers and including GIS data layers for Massachusetts and Connecticut
 - Personnel and training: Core administration and support team trained in GIS techniques and familiar with key HEALTH data layers ready to meet the needs for GIS during public health emergencies
 - Emergency operations plan (EOP): A component of the HEALTH EOP and, with the Syndromic Surveillance EOP and the Emergency Response Informatics EOP, part of a coordinated decision support system for emergency preparedness and response
- ➤ Created an interactive mapping template by participating in a regional bioterrorism radiation control exercise. This provided decision support for surveillance, operations and communications during an emergency response through the use of GIS, including dissemination of information between various local, state, federal agencies, the media, and the public.

Development of Support Materials for Geographic Data Coding in Rhode Island

Goal: To develop geographic data coding systems to support public health programs including emergency response needs.

- ➤ Produced the 7th Edition of the Rhode Island Census Tract Coding Guide and Master Street Index based on the 2000 Census
- ➤ Distributed the Coding Guide within the HEALTH to programs with geocoding requirements, as well as outside of the Department to agencies, such as hospitals, the

- RI Cancer Registry, and Emergency Medical Services departments that also have reporting requirements
- Developed systems to use census tracts as the level of geography collected in the realtime data collection of the syndromic surveillance system in hospital emergency departments, currently under development, tracking the chief complaints of people with hospital ED visits to identify possible bioterrorism or other health emergencies

Risk Communication and Public Health Information Municipal Health Alert Network

Goal: Establish and test an interim emergency communications network with municipalities

Partners: Municipalities

Major Accomplishments:

HEALTH worked with municipalities to create <u>and test</u> a phone/fax/email communications protocol for use during emergencies. HEALTH routinely uses this protocol for communicating public health information to municipal officials during public health emergencies such as West Nile Virus, SARS and other public health emergencies. This network complements statewide radio technologies and other methods of emergency communication. The network's quarterly newsletter, "Incidentals", keeps municipalities informed about the progress of state preparedness and other topics.

Exercises:

Tested at least twice each year during 2002-2003. Used on routine basis during real public health emergencies (e.g. Anthrax 2001) and sending health alerts

Integrated Municipal Network: RINET-Muni

Goal: Establish a high-quality, integrated network for computer based communications for municipalities

<u>Partners</u>: Secretary of State's Office, RI Emergency Management Agency, RI Department of Administration, Municipalities, RI Network or Educational Technology (RINET)

Major Accomplishments:

Rhode Island established a high-quality, exclusive and integrated network connecting all municipalities using a continuous, computer-based communication. Modeled after RINET (RI Network for Educational Technologies), which connects public and private schools throughout the state,

- > Supports both routine and emergency communications among state and municipal governments.
- ➤ Hosts important e-government programs such as the electronic voter registry, electronic birth certificates, and electronic public meeting records.
- > Fully supported for ten years.
- Over 30 municipalities connecting so far.

RINET-Muni completes one segment of the state communications plan—a comprehensive approach for establishing multi-technology, interoperable and redundant communications throughout the state.

Bioterrorism Awareness: A Systematic Approach To Informing The Public And Preventing Panic

Goal: To promote "productive action" by a population during emergencies

<u>Partners</u>: Local media outlets, US Post Office, PSI Associates, community-based organizations.

Major Accomplishments:

HEALTH decided to prepare the public through a carefully planned and executed program of information specifically tailored to the needs of the RI public.

- ➤ Began in 2002 with focus group research involving key segments of the population
- > Supplemented by interviews with community leaders and directors of community-based organizations.
- ➤ The public wanted simple, straightforward information on "where to go" and "what to do" in an emergency.
- ➤ HEALTH designed and distributed (in 2003) a short flyer to over 400,000 Rhode Island residences via direct mail.
- ➤ The purpose of the flyer was to let the public know that we are getting prepared and to build trust.

Using the same research HEALTH designed a second public information piece in 2004.

- ➤ "Make a Kit, Make a Plan, Be Prepared," booklet provides simple instructions to prepare for emergencies.
- ➤ Distribution will occur through a combination of newspapers, direct mail and grassroots mobilization (e.g. Boy Scouts) supported by TV, radio and transit advertisements.
- ➤ The project evaluation will measure the change in knowledge and behavior and help to guide future phases of the public information plan.

HEALTH interviewed with key media executives to determine the needs of the media during emergencies.

- The media acts as the main conduit for emergency information to the public.
- ➤ The media acknowledges our expertise but sometimes views our protection of confidential health care information as unresponsive.
- ➤ HEALTH embedded a reporter and photographer in the state's strategic national stockpile exercise
- ➤ HEALTH implemented a call-in "technical briefing" for news editors and directors for early in a public health crisis.

Risk Communications Training

Goal: To prepare HEALTH, municipal and other state agency public information officials to respond effectively during emergencies.

Partners: Other state agencies, hospitals, municipalities.

Major Accomplishments:

The Bioterrorism Preparation Communications Program expanded its Risk Communications Training Plan with new and advanced skills workshops.

- Participants include municipal, state and hospital public information officers and spokespersons. I
- ➤ HEALTH provided basic bioterrorism communications presentations to community-based agencies and university classes.
- ➤ June 2003 workshop: the Governor's spokesperson and the Joint Information Center (JIC) Manager, explained how a Joint Information Center would operate during a public health crisis to an audience of municipal, state and hospital public information officers
- November 2003 a two-day Risk Communications workshop given by Barbara Reynolds, CDC's Chief of Risk Communications and an author of a major risk communications manual.
- ➤ One-hour presentations on bioterrorism communications to community-based agencies serving minority populations—following survey research on how to best communicate with populations who would have difficulty understanding English or Spanish emergency broadcasts
- ➤ Public Health Emergency Communications Network for Special Populations planned for 2004.

Exercises: Two major risk communications exercises: one with hospitals and another with state agency and municipal officials.

Emergency Public Information Line (EIL)

Goal: To respond to overwhelming public telephone inquiries during an emergency.

Major Accomplishments:

The Bioterrorism Preparedness Communications Team developed a <u>five-tier response</u> <u>structure</u> for public inquiries.

- ➤ Call the main HEALTH phone number and speak with three trained, senior administrative assistants.
- ➤ Call the Family Health Information Line (up to five lines and can return recorded calls from home if necessary on nights and weekends).

- Activate 19 networked Emergency Information Lines located in the Health Policy Forum (a 20th phone is specially programmed to give long-message responses to blind callers).
- Add about 50 specially-equipped desk phones within HEALTH to the EIL network.
- ➤ In case of a breakdown in the state telephone system, Rhode Islanders can call the CDC hot line.

Exercises: HEALTH activates this telephone response during drills and emergencies such as the 2003 hurricane alert, 2003-2004 flu season and other emergencies.

Emergency Response Plans for HEALTH

<u>Goal</u>: Continually updated plans for response to medical and public health emergencies. All plans are combined with a series of exercises to improve the products and overall emergency response capabilities of the department.

Partners:

- ➤ Rhode Island Emergency Management Agency,
- ➤ Rhode Island State Fire Marshal,
- ➤ Office of State Medical Examiner,
- ➤ Public Water Systems in Rhode Island,
- ➤ Food Businesses in Rhode Island,
- ➤ Hospital and private clinical laboratories,
- ➤ US Department of Homeland Security,
- ➤ US Department of Health and Human Services,
- ➤ Federal Bureau of Investigation,
- > Centers for Disease Control,
- > Association of Public Health Laboratories,
- ➤ Laboratory Response Network,
- ➤ Rhode Island Department of Environmental Management,
- ➤ Municipal government in Rhode Island,
- ➤ Hospital Association of Rhode Island

Major Accomplishments:

Plans include an Emergency Operations Plan for the Health Department (annex to the State Emergency Operations Plan) and department plans to deal with a number of medical and public health-related emergencies such as:

- > Smallpox, SARS, Flu pandemic,
- ➤ Water emergencies, Food emergencies, Radiation emergencies.
- ➤ Medical Emergency Distribution System (MEDS) plan to provide vaccinations or medications to the entire population of the state if necessary,
- ➤ Healthcare facility emergencies, and
- Mass fatalities.

Exercises:

- ➤ In June 2003 participated in a statewide exercise involving the assumption that terrorists released sarin nerve gas into a commercial airliner upon arrival, included field and emergency operations center elements.
- ➤ In August 2003 HEALTH sponsored a full-scale exercise of the Medical Emergency Distribution System involving state agencies, five community participants, Federal partners, and the press. URI will institutionalize a semi-annual program of exercises to train workers and further develop local response capacity.
- Ongoing series of tabletop exercises to test all plans for response to public healthrelated emergencies

Education and Training

The Public Health Preparedness and Response to Bioterrorism Program Funding has enabled HEALTH to make significant progress toward providing appropriate education and training for public health professionals, healthcare providers and first responders in preparation for and response to public health emergencies.

Goal: To provide for <u>training of healthcare providers and first responders</u> as well as administrative and consultative services to HEALTH and other healthcare providers.

<u>Partners</u>: Center for Biodefense and Emerging Pathogens (CBEP) at Memorial Hospital

- ➤ Development of a core curriculum by job category within the healthcare field.
- ➤ Delivered over 100 educational presentations (lectures, seminars, etc.) to hospitals, physician groups, nursing groups, professional schools, emergency services providers, unions, hospital workers, etc. in Rhode Island, New England, and elsewhere.
- ➤ Publication of a variety of pamphlets, posters, and other reference materials for use in healthcare settings by lay as well as professional personnel.
- Contributions, by way of advisory panel participation and solicited consultations, to biodefense on regional (e.g. involvement in the drafting of Brown University SARS guidelines) and national (e.g. advisor to "ER one" project in Washington D.C., funded by O.E.R. to design a bioterrorism-ready emergency room) levels.
- ➤ Development of an annual conference, "Medicine in the Time of Bioterrorism," in which nationally recognized leaders in the field of biodefense come together to present state-of-the-art information to physicians, other clinicians, scientists, and public health professionals in the region.
- Creation of the Vaccine Study Unit at Memorial Hospital of RI to serve as a site for the clinical testing of novel vaccine against potential agents of bioterrorism and other emerging infections. To date, four clinical studies of a new generation smallpox vaccine have been performed; two have been successfully completed, and two are currently in progress.
- Reliable, readily available, expert clinical consultation to the Rhode Island Department of Health in a variety of areas referable to infectious disease threats
- ➤ Directed the medical operation of the state's smallpox vaccination program out of the MHRH facility in Cranston. CBEP provided smallpox vaccination training to groups of volunteer nurses and doctors in support of the state program.
- ➤ Leading an ongoing, federally-funded project to investigate and discover novel therapies for anthrax infection.
- ➤ CBEP Director serves on the Scientific Steering Committee for the federally-funded New England Regional Center of Excellence in bioterrorism and emerging infectious diseases.

Center for Biodefense and Emerging Pathogens (CBEP): HEALTH has a cooperative agreement with CBEP that provides for training of healthcare providers and first responders as well as administrative and consultative services to HEALTH and other healthcare providers.

CBEP was established on 1 September 2001 with a three-pronged mission: providing education, consultation and research in the arenas of defense against biological threats and emerging infectious diseases. Center activities are largely geared towards healthcare workers at all different levels; CBEP acts in support of and in partnership with the RI Department of Health and also provide services to a wide variety of agencies and organizations on both a recurrent and an *ad hoc* basis (see attached). CBEP activities are local, regional and national. Since inception:

<u>Goal</u>: To provide <u>graduate level public health education for the public health workforce</u>, incorporating face-to-face and distance learning technologies, with an emphasis on emergency preparedness.

<u>Partners</u>: University of Massachusetts School of Public Health and Health Sciences, (Harvard and Yale Universities to be added)

Major Accomplishments:

➤ Courses in Public Health Emergency Management, Environmental Health Practices, Agents of Environmental Illness and Responding to a Suspected Terrorist Attack.

Goal: To enhance infrastructure for training

- ➤ Wired additional conference rooms within HEALTH to receive satellite broadcasts (There are now 9 viewing areas within HEALTH).
- ➤ Upgraded computers for those participating in public health distance learning classes to accommodate class technologies for on-demand learning.
- ➤ Outfitted 8 common-use computers where people can access on-demand computer training modules either via the Internet or CD-ROM.
- ➤ Investigating and implementing, this grant year, a learning management system, sponsored by the Public Health Foundation, which will ultimately track all workforce development training of the public health and healthcare workforce, as it pertains to HEALTH and partner-sponsored educational opportunities.

HRSA Hospital Bioterrorism Program

Briefly described below are significant examples of the uses of the FY 03 Health Resources and Services (HRSA) Hospital Bioterrorism Preparedness Grant to the Rhode Island Department of Health.

Hospital Emergency Room Diversion Plan

Goal: Assure capabilities of hospital emergency departments to accept EMS rescue delivered patients.

<u>Partners</u>: All licensed hospitals, the Hospital Association of Rhode Island, the Rhode Island Ambulance Service Advisory Board, licensed EMS providers, and the five Regional Fire Dispatch Units.

Major Accomplishments:

Established and implemented a Revised Hospital Emergency Room Diversion Plan – A previous, voluntary plan that did not cover all hospitals has been replaced with a more complete and useful plan that all hospitals are required to follow with respect to the diversion of EMS vehicles. The Plan was implemented on March 1, 2004. A more useful and robust computerized diversion tracking system software development is nearly complete. Acquisition of equipment is next step to implement the computerized diversion system. Patient tracking capability is also being developed as a component for future implementation.

HRSA Hospital Bioterrorism Program – continued

Inter-Hospital Communications

Goal: Expand and provide redundant inter-hospital communications.

<u>Partners</u>: All licensed hospitals, the Hospital Association of Rhode Island, the Rhode Island Ambulance Service Advisory Board, licensed EMS providers, the five Regional Fire Dispatch Units, the Narragansett Indian Tribe, and the Rhode Island Airport Corporation

- Nextel units have been installed at the Airport, Narragansett Indian Health Center, Butler Hospital and Bradley Hospital. All other hospitals previously were provided with Nextel units on the system. 2nd Nextel Units distributed to hospitals for use in emergency operations center.
- ➤ Hospital Emergency Administrative Radios (HEAR) installation is nearly completed. Each HEAR radio functions independently and without use of landlines or cell towers thus providing survivability and redundancy.
- For emergency "alerting", the RITERN 800 MHz radio installation for hospitals is nearly completed. This system is utilized as an "alerting" system for the dissemination of emergency messages to the state agencies, municipalities and other key emergency related entities. By funding the development of hospital-based units, the acute care facilities will receive timely notification of all alerts.
- Total cost for communications systems implementation is approximately \$400,000.00

HRSA Hospital Bioterrorism Program - continued

Hospital Capacity Enhancement

<u>Goal</u>: Build capacity for hospitals to respond to the patient care needs related to a Bioterrorism attack or other disasters. Capacity is being increased on an individual facility basis and on a collective basis through inter-hospital coordination and cooperation.

<u>Partners</u>: All licensed hospitals, Hospital Association of Rhode Island.

<u>Major Accomplishments</u>: The Department has entered into contracts with each licensed hospital whereby funding is provided for specific "deliverables." Each deliverable contributes to the individual facility's readiness and collectively to the system's readiness to respond to Bioterrorism attacks or other disasters. HEALTH has issued contracts to the individual hospitals totaling \$730,000 addressing the HRSA specified critical benchmarks.

- Surge Capacity Plan Hospital Grants for each of 14 hospitals to complete a surge capacity plan to accept an equitable number of patients to meet the statewide surge capacity from a mass casualty incident. Each hospital has been assigned a "surge capacity" indicating the influx of patients that must be accommodated within sixty (60) minutes.
- Pharmaceutical Cache in Hospitals Stockpile of pharmaceuticals for treatment of hospital response personnel in event of a biological incident requiring prophylaxis. Each hospital will maintain a separate vendor managed inventory (VMI) of pharmaceuticals based upon HEALTH guidance to be available for the treatment of hospital staff in the event of a bioterrorism attack or other public health emergency, as appropriate.
- ➤ Mental Health, Retardation and Hospitals (MHRH) To increase the behavioral health disaster response capacities for 3 psychiatric hospitals (Eleanor Slater state; Butler Hospital private; and Bradley Hospital private) a total of \$30,000 has been provided.
- ➤ Hospitals are required to adopt and implement terms and conditions of MOU as relates to decontamination policies and procedures. Hospitals will maintain an up-to-date inventory of decontamination and personal protective equipment provided by HEALTH. Hospitals will maintain provided equipment in operational capacity at all times. The equipment utilized has been standardized across the state to permit standardized training and use.
- Funding has been provided to permit each hospital to host a minimum of one (1) training session per grant year for Hospital Decontamination Training provided by the Rhode Island Emergency Management Agency (RIEMA). Hospitals may host additional training sessions or provide other training opportunities for staff as necessary to ensure that all personnel (clinical, facilities management and operations) who are required to participate in decontamination activities are trained in compliance with appropriate federal regulations. Hospitals are also required to participate in Train-the-Trainer courses for the Hospital Decontamination Training program when offered by RIEMA. Hospitals are installing fax machines and printers (provided by

- HEALTH through separate CDC grant funding) directly within the laboratory area to ensure ability to communicate with the state HEALTH Department laboratory.
- Each hospital is increasing the "isolation" capacity of its facility by no less than one (1) additional room through capital improvement or retrofitting of existing clinical space utilizing portable/mobile equipment or means as acceptable to HEALTH.
- ➤ Each hospital is preparing an "All Hazards" Emergency Management Plan incorporating NIMS/HEICS. Documentation of staff training, implementation and exercise of program is required.
- Each hospital is being provided with resources to place a burn/disaster cart in the hospital's emergency department with specified required equipment to be purchased with funding provided by HEALTH. Hospitals are required to maintain the designated supply and readiness of cart at all times.
- Each hospital is receiving financial support to participate in a tabletop exercise to be coordinated by HEALTH once per grant cycle. In addition, each hospital is required to participate in statewide exercises sponsored by the Rhode Island Emergency Management Agency that occur during the grant cycle as may be requested by HEALTH.
- ➤ Decontamination Equipment has been provided to each acute care hospital with an emergency department including:
 - o Zumro 400sq ft inflatable decontamination tents will be delivered to all acute care facilities on March 18th.
 - o MARK I Kits Nerve Agent sets for Hospital Disaster Cart
 - o HEICS Vests Hospital Incident Command vest sets
 - o Trauma and Burn Care Equipment for burn care carts to be stationed in each acute care facility
 - o Radiological Dosimeters
- Total cost of Decontamination equipment approximately \$300,000.00

HRSA Hospital Bioterrorism Program - continued

Trauma Care Systems

Goal: Assure that Rhode Island hospitals have appropriate and effective means for the delivery of trauma care, whether related to terrorist attacks or to other disasters.

<u>Partners</u>: All licensed hospitals, all licensed EMS providers, the Hospital Association of Rhode Island, the American College of Surgeons

<u>Major Accomplishments</u>: HEALTH recently engaged the American College of Surgeons to conduct a Trauma System Evaluation Consultation. Their Report and Recommendations regarding needed changes and improvements in Rhode Island's Trauma System are expected to be provided shortly.

HRSA Hospital Bioterrorism Program - continued

Coordinated Hospital Planning and System Development

Goal: Assure coordinated planning and system development for health care service response to terrorism attacks and other disasters.

<u>Partners</u>: All licensed hospitals, the VA Hospital, the US Naval Medical Clinic/Newport, RI Emergency Management Agency, the Health Center Association, the Narragansett Indian Tribe.

- ➤ Established the RI Hospital Emergency Preparedness and Planning Group Linking all Hospitals, Medical Institutions, Clinics (Indian Clinic), State Agencies, Federal Agencies (VA Medical Center)
- Recently completed Needs Assessment for all hospitals in the state.
- Coordinating with each facility to assist them in organizing their plans to link with the statewide response plans and protocols.

Program Updates

Drinking Water Security

Goal: To enhance security of public drinking water systems and to enhance preparedness for response to emergencies.

Partners: Public Water Systems, Rhode Island Emergency Management Agency, USEPA

- ➤ Oversight and assistance to Rhode Island public water systems in meeting their requirements of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002.
- Research and incorporation of security and vulnerability concepts into plans, procedures, design approvals, and inspections of Public Water Systems.
- ➤ Providing technical assistance and training to Rhode Island public water systems in the areas of conducting vulnerability assessments, emergency response planning, crisis communications, and security.
- ➤ Development of water system emergency contact information database.

Food Security

<u>Goal</u>: Determine the high-risk food assets for each Rhode Island town and produce a list of vulnerable food establishments

<u>Partners</u>: US Food and Drug Administration, Food safety programs from other Northeast States, University of Rhode Island, Association of Food and Drug Officials

- ➤ Developed a food security survey, which initially targeted vulnerable RI restaurants, food processors, farms, retail food stores, etc. Survey results are being compiled and will be used to assess the strengths and weaknesses of the food industry regarding securing our food.
- ➤ Developed a Northeast Food and Drug Officials (NEFDOA) coordinated effort for dealing with food security issues, including planning, surveillance, training, and response. RI developed a federal and regional emergency contact list, New York developed a food security survey, MA, CT, NY, and RI developed informational food security flyers/pamphlets. Additionally, RI developed a national survey form, which is being used by the Association of Food and Drug Officials (AFDO) to determine the status of food security in all states. The goal is to subsequently share food security-related information, e.g. response plans, tabletop exercises, surveillance techniques, etc., across the states rather than reinvent the wheel.
- Enhanced tracking of foodborne illnesses/complaints through revisions in surveillance procedures. The BT Food Security Coordinator reviews the illness log weekly and consults with a Disease Control epidemiologist if aberrations are noted. Food Protection is currently working with the Office of Communicable Diseases and the State Laboratory to complete the Guidelines for Investigating Foodborne Outbreaks, which will be used as a training tool for staff to enhance our response capacity.
- ➤ Developed food security pamphlets, which provided recommendations for risk reduction based on FDA guidelines, and mailed to over 5,000 food establishments licensed with the Office of Food Protection.
- ➤ Organized and hosted a one-day Food Security Seminar (October 17, 2003), which was attended by industry and regulators, and included our food protection staff. The seminar's objective was to provide a practical approach to developing an effective food security program, reflecting the FDA security guidelines and the increasing expectations for food security of major customers.

Vulnerability Assessment of Indoor Air Handling Systems

Goal: Assist building owners/managers in assessing the vulnerabilities of their facility's airhanding systems to a biological or chemical attack.

<u>Partners</u>: Rhode Island Department of Administration, Rhode Island Hospital, Local HazMat officials

- ➤ HEALTH's Office of Occupational and Radiological Health, Indoor Air Quality Program created a Heating, Ventilating and Air Conditioning Building Vulnerability Assessment (HVAC-BVA) tool. This tool assists the building owner/manager to locate specific vulnerabilities in their air-handling system(s), to educate them about those vulnerabilities, and to motivate them to take actions to reduce their building's vulnerability.
- ➤ The HVAC-BVA tool pilot study phase in both public and private high priority buildings is anticipated to be in April 2004, after which time the tool will be released to target facilities. The Indoor Air Quality program will train building owners/managers in the use of the HVAC-BVA tool and assist in technical issues that may arise.

Radiation Safety

<u>Goal</u>: To assist emergency responders in identification and handling of radiation issues in the event of a bioterrorism or licensee-related radiological incident.

<u>Partners</u>: Rhode Island Emergency Management Agency, Rhode Island Department of Environmental Management

- > Staff trained in basic radiological health, radiological WMD, emergency response and incident command that provide the necessary background and skills
- Re-institute a maintenance and calibration program to ensure that field survey equipment is properly maintained and available for use in an emergency situation.
- Replace antiquated or damaged survey equipment with state-of-the-art field survey equipment that will be used to locate, assess radiological hazards and in some instances identify the isotope(s) and activity.
- ➤ Purchase electronic "alarming rate" dosimetry devices to be administered by the radiation control agency and used by emergency responders from other state agencies/offices. These devices have/will be distributed to selective state agencies/offices to provide them with a means to obtain immediate indication of radiation levels that exceed pre-established alarm points and to assess their accumulated dose at a possible radiological incident. The radiation control agency has developed a distribution, maintenance, and training program in conjunction with establishing a database to account for personnel doses for persons assigned dosimetry. To date members of the State Police truck squad and the Rhode Island Department of Environmental Management − Air and Hazardous Emergency Response Unit have been issued dosimeters and have been provided instruction in their use. Retraining, maintenance and downloading of personnel doses into the database is scheduled on a six (6) month frequency.

School and Child Care Center Emergency Response Education and Training

Goal: Develop tools and training to assist schools and child care providers prepare for an emergency event

<u>Partners</u>: Includes the state Departments of Health and Education and the RI Emergency Management Administration

Major Accomplishments:

The School and Child Care Center Emergency Response Education and Training project provides the formative research to assess school and child care provider needs and RI EMA will be providing training and help in developing school friendly tools. The project will result in better working relationships between schools, child care providers, local emergency responders and other who address the aftermath of traumatic events.

Removal of Laboratory Chemicals from Schools

Goal: To remove dangerous laboratory chemicals from Rhode Island schools

<u>Partners</u>: Rhode Island Department of Environmental Management, Rhode Island Department of Education, Brown University, Rhode Island Department of Labor and Training, School Maintenance Directors Association

Major Accomplishments:

➤ In response to incidents in RI and the rest of the nation in which chemicals from school science programs were involved in bomb manufacture and unintentional contamination incidents, \$15,000 in grants will be awarded to five schools for chemical removal services. Chemical removal services will be provided by a hazardous waste contractor. Chemical removal will be performed when school is not in session (i.e., during school vacations).

Mercury Thermometer Exchange Program

Goal: To reduce the threat of intentional and accidental mercury contamination of the environment from thermometers and other mercury-containing devices.

<u>Partners</u>: Audubon Society of Rhode Island, Clean Water Fund, CVS Pharmacy, Providence Fire Department, Rhode Island Dept of Environmental Management, Rhode Island Resource Recovery Corporation, Warwick Fire Department.

Major Accomplishments:

➤ Sixty four pounds of toxic mercury was collected from the community during the first annual mercury thermometer exchange day on Saturday, November 15, 2003. More than 900 residents participated in this opportunity to properly dispose of unwanted elemental mercury by exchanging over 2,000 thermometers and 18 other items, which contained a significant quantity of mercury. Removing 64 pounds of mercury from the community and disposing of it properly is one step in limiting the potential for both accidental and intentional mercury exposure in Rhode Island.

Academic Partners

<u>Goal</u>: To engage academic partners in preparation for response to public health emergencies.

Partners: Brown University; the University of Rhode Island (URI

Major Accomplishments:

- > Brown University: Developed a plan to
 - o Support the City of Providence in their emergency response planning;
 - o Utilize medical student volunteers in emergency response and planning; p
 - Provide bioterrorism preparedness trainings and conferences for medical students and other interested parties in conjunction with Memorial Hospital;
 - Prepare to open a dispensing clinic at Brown University that will include the City of Providence.

➤ University of Rhode Island:

- o Identified a liaison to work with Health in Bioterrorism Preparedness and Planning;
- Established a pilot dispensing clinic to train pharmaceutical and nursing students for either a MEDS or Smallpox incident.

Summary of Activities Conducted by Rhode Island Department of Health and Key Partners in Response to the Discovery of Ricin at postal facilities in Washington, DC, February- March 2004.

Background. During the first week of February, Ricin was positively identified in postal facilities in Washington, DC. This report summarizes the response and planning activities conducted by the Rhode Island Department of Health in response to this threat. At the time, there was the belief that either more samples would be mailed throughout the country and/or that public concern would fuel numerous "suspicious powder" responses within Rhode Island much like the response to the discovery of anthrax in New York and Washington, DC in 2001

Response Activities. The principal state agencies involved were the Department of Health, the Emergency Management Agency, the Office of the State Fire Marshal, the Department of Environmental Management, the State Police, and the FBI. These agencies collaborated in formulating response plans. Within the Department of Health, the following were the key activities:

- 1. Activated a response using the Department's Emergency Operations plan. This included an assignment of planning and operational responsibilities using the Incident Command System (ICS) which has been adopted by the Department of Health for response to public health emergencies.
- 2. Key actions taken included
 - > Developed and distributed Ricin information to health care providers in the state.
 - Prepared products for public dissemination if needed (these were not needed or used).
 - ➤ Obtained the appropriate laboratory equipment and supplies to conduct Ricin testing.
 - > Confirmed the state-wide protocols for handling "suspicious powder" incidents.

Results.

- ➤ The Washington DC events proved to be unique; there were no further events nation-wide.
- Rhode Island had a few suspicious powder responses. All tests proved negative.
- > Testing equipment and procedures were put in place by the state lab.
- Improved state response protocols were developed and continue to be modified.
- ➤ Periodic situation reports were used to share information among the working group.

The Health Department maintained an organizational structure to monitor the situation for approximately one month, then deactivated the structure.

The point of contact for this report is Greg Banner. 222-6868.